

February 6, 2006

Ms. Janice L. Bell
 NEPA Documents Manager
 U.S. Department of Energy
 National Energy Technology Laboratory
 626 Cochrans Mill Road
 P.O. Box 10940
 Pittsburgh, PA 15236-0940

Re: DOE/EIS-0357
Draft Environmental Impact Statement for the Gilberton
Coal-to-Clean Fuels and Power Project (November 2005)

Dear Ms. Bell:

Citizens for Pennsylvania's Future (PennFuture) submits the following comments on the Draft Environmental Impact Statement (DEIS) for the Gilberton Coal-to-Clean Fuels and Power Project proposed by WMPI Pty, LLC (WMPI). PennFuture is a statewide public interest membership organization dedicated to creating a just future in which the environment, communities and the economy thrive. PennFuture has worked to reduce greenhouse gas emissions and to improve and protect water resources across Pennsylvania through public outreach and education, advocacy, and litigation. Since early 2003, PennFuture has provided input on the pending draft Total Maximum Daily Load (TMDL) for the Mahanoy Creek Watershed (2002) and related permitting matters.

PennFuture commends WMPI, the Department of Energy (DOE), and the Commonwealth of Pennsylvania for their efforts to bring this project, and its energy production and mine reclamation benefits, to fruition. Successful demonstration of the gasification and liquefaction technologies that would be applied at the proposed plant would be a boon to mine reclamation efforts in a number of states while tapping a domestic source of liquid fuel and electrical energy that would displace imports from foreign nations. As explained in greater detail below, PennFuture's concerns about the project and the DEIS are limited to: 1) the emissions of carbon dioxide and the failure to analyze the alternative of carbon sequestration; and 2) the handling of wastewater and the evaluation of water quality impacts.

1. The DEIS fails to analyze the alternative of carbon sequestration.

The DEIS states that "[t]he proposed facilities would increase global CO₂ emissions by about 832,000 tons per year, which is about 0.003% of global emissions resulting from fossil fuel combustion." (DEIS, p. xxi) The DEIS also indicates that the "Rectisol unit" would recover an unidentified portion of this carbon dioxide, some of which would be sold to specialty gas companies, and the remainder of which "could be sequestered in the future (although no firm plans currently exist)." (DEIS, p. 2-7) This "CO₂ Sequestration" option also is shown in the generalized schematic diagram on page 2-4 of the DEIS.

51-1

Citizens for Pennsylvania's Future
 7 N. Third Street
 Pittsburgh, PA 15101-1113
 717-214-7920
 717-214-7927
 E-mail: info@pennfuture.org

Citizens for Pennsylvania's Future
 425 Sixth Ave., Ste. 2770
 Pittsburgh, PA 15219
 Tele: 412-258-6680
 Fax: 412-258-6685
 e-mail: info@pennfuture.org

Citizens for Pennsylvania's Future
 1518 Walnut Street, Suite 1100
 Philadelphia, PA 19102
 Tele: 215-545-9691
 Fax: 215-545-9637
 e-mail: info@pennfuture.org

The DEIS says little about the alternative of CO₂ sequestration beyond indicating that there are no firm plans today to sequester the carbon dioxide that is separated from the gasses prior to Fischer-Tropsch synthesis. Sequestration is not among the “Alternatives Dismissed from Further Consideration” discussed in Section 2.2.2 of the DEIS, nor should it be. In light of the scientific consensus that greenhouse gas emissions must be curbed, where a production process already includes recovery of carbon dioxide, it is a shame to see that captured CO₂ vented to the atmosphere rather than permanently sequestered beneath the ground. The DEIS should discuss that alternative, and WMPI and the Commonwealth of Pennsylvania should vigorously pursue it in order to demonstrate another important technology, reduce the new plant’s greenhouse gas emissions, and remove a potential obstacle to replication elsewhere.

51-1

2. Wastewater handling alternatives and water quality impacts

The DEIS inadequately evaluates the water quality impacts of the activities associated with the proposed project and contains inconsistencies about basic items such as whether wastewater discharges will be authorized by a National Pollutant Discharge Elimination System (NPDES) permit. What is in the “tailings pond” into which two wastewater discharges will be directed? Does that pond contain coal refuse or coal ash materials from which metals, sulfate, or other pollutants may be released and then enter the underlying mine pool? Given that Pennsylvania’s reining and abandoned mine reclamation programs seek to fill the pits and seal the openings that recharge the region’s mine pools, why is this project designed to work at cross purposes with that objective by deliberately reintroducing water – possibly contaminated by percolation through tailings or spoil materials – into the mine pool? A DEIS should answer such fundamental questions affecting the environmental consequences of the proposed project. This one does not, and therefore fails to satisfy 40 C.F.R. §§ 1502.1, 1502.2(g), 1502.16(d).

51-1A

Overall, after reading the DEIS, one cannot tell whether this project, as designed, will benefit the hydrologic regime and the water quality of Mahanoy Creek. PennFuture believes that modest changes in the wastewater handling operations could provide greater water quality benefits and thereby make a good project better. Regardless of whether those suggested modifications are made, however, the wastewater discharges from the proposed facilities must be covered by a NPDES permit.

a. The DEIS contains conflicting information about whether the wastewater discharges associated with the proposed project will be permitted and regulated under the NPDES program.

Section 3.4.3 of the DEIS (“Mine Pool”) states that “[t]reated wastewater from the existing Gilberton Power Plant is discharged to a 6-acre tailings pond in the Mahanoy Creek valley. Pond capacity is approximately 156 million gal. Water seeps from the pond into the underlying mine pool. Discharge to the pond is regulated by Pennsylvania NPDES industrial wastewater discharge permit 278784, issued in 1997.” Section 7.2 of the DEIS (“State Requirements”) reiterates some of this information but describes the pond receiving the wastewater as an “ash pond” instead of a “tailings pond.” (DEIS, p. 7-5)

51-2

In fact, the Gilberton Power Company's industrial waste discharge is authorized by NPDES Permit No. PA0061697, which was issued before 1997, see 27 Pa. Bull. 5282-83 (October 11, 1997) (proposing renewal of NPDES permit), and which is again before the Pennsylvania Department of Environmental Protection (PADEP) for renewal. See 35 Pa. Bull. 2421 (April 23, 2005). The notice of the most recent renewal of the NPDES permit does not mention a tailings pond and states that "Gilberton Power Company . . . is authorized to discharge from a facility located in Mahanoy Township, Schuylkill County to Mahanoy Creek." 30 Pa. Bull. 253 (January 8, 2000) (emphasis added). See also 29 Pa. Bull. 4081 (proposing "renewal of an NPDES permit to discharge treated wastewater into Mahanoy Creek") (emphasis added). In light of the general objective of preventing water from coming in contact with coal ash and coal refuse, it is unclear why PADEP would authorize any discharge, particularly a discharge of treated wastewater, into a tailings pond containing coal refuse or coal ash. In any event, the Pennsylvania Bulletin notices cited immediately above show that PADEP regards a discharge to this particular tailings pond as an indirect discharge to Mahanoy Creek, presumably via the Gilberton mine pool.

51-2

A DEIS must list all federal permits that must be obtained in order to implement the proposal. 40 C.F.R. § 1502.25(b). Immediately after discussing the existing, NPDES-permitted Gilberton Power Company discharge, Section 7.2 of the DEIS states that the "[d]ischarge of treated effluent from the proposed facilities would also require an NPDES permit issued by [PADEP]. A new set of effluent standards would be established for the new facilities." (DEIS, p. 7-5) But WMPI has not applied for, and apparently has no intention of applying for, a NPDES permit. It has applied only for a Water Quality Management "Part II" Permit (WQM Permit No. 5405201) for "the construction and operation of a new wastewater treatment facility to discharge .73 mgd of treated processed wastewater into the Mahony [sic] Valley Mine Pool." 35 Pa. Bull. 1998 (April 2, 2005).

51-3

As described in the DEIS, however, the treated wastewater from the proposed plant will not be discharged directly into the mine pool, but instead into the "tailings pond," from which it will "percolat[e] back to the mine pool." (DEIS, p. 2-12) The DEIS indicates that the tailings pond will receive two discharges associated with the proposed project: one of wastewater used in the flotation process by a new or upgraded culm beneficiation plant, and the other from the coal-to-liquid fuel plant's wastewater treatment system. (DEIS, pp. 2-12, 2-13) Contrary to the figure of .73 million gallons per day appearing in the Pennsylvania Bulletin notice, however, the DEIS estimates the "[e]ffluent discharged to tailings pond" at 1,867 gallons per minute, or roughly 2.7 million gallons per day. Of that total, about 380 gallons per minute would come from the beneficiation process, and the remainder from the coal-to-liquid fuel plant's treatment system. (DEIS, pp., 2-12, 2-13) And contrary to its own later suggestion in Section 7.2 that the "[d]ischarge of treated effluent from the proposed facilities would also require an NPDES permit issued by [PADEP]" (DEIS, p. 7-5), Section 2.1.6.2 of the DEIS ("Liquid Discharges") states that wastewater from the proposed plant's treatment facility would be "discharge[d] to a tailings pond [with] seepage back to the mine pool," but that "[n]o wastewater would be discharged to surface waters." (DEIS, p. 2-15)

51-4

PennFuture suspects that the unlined “tailings pond” that will receive the discharges from the beneficiation plant and the coal-to-liquid fuel plant’s treatment system, shown on page 2-3 of the DEIS, is the same tailings pond that currently receives the NPDES-permitted discharge of treated wastewater from the existing Gilberton Power Company power plant, as well as the discharge of wastewater from the existing culm beneficiation plant. (Draft EIS, p. 3-16) Given that a NPDES permit is required to discharge treated wastewater from the existing power plant into the tailings impoundment, the same must be true for a discharge of treated wastewater from the proposed coal-to-liquid fuel plant (and also for a discharge of wastewater from a new or upgraded culm beneficiation plant). Pennsylvania’s NPDES regulations define “[s]urface waters” as including “ponds.” 25 Pa. Code § 92.1. The exclusion in that definition for “water at facilities approved for wastewater treatment such as waste water treatment impoundments” applies to engineered treatment structures meeting modern design and construction standards, like the “synthetic-lined retention pond” in the proposed coal-to-liquid fuel plant’s treatment system. The exclusion does not apply to unlined and leaking waste disposal impoundments like a tailings pond.

51-5

For the reasons explained in the next section of these comments, any discharge of wastewater into a tailings pond would seem ill-conceived. If such a discharge occurs, however, it must be authorized by a NPDES permit.

- b. The DEIS does not adequately analyze the impacts of the proposed wastewater handling plan.

In many contexts, PennFuture encourages recharging the groundwater by infiltration of clean water through the soil mantle, whether by spray irrigation of treated wastewater, use of porous paving materials, or use of engineered and “non-structural” best management practices for increasing stormwater infiltration. In the context at hand, however, every effort should be made to keep water out of the toxic environment of the mine pool(s) that collects water infiltrating from the surface lands, and from which PADEP pumps an average of 2.5 billion gallons per year of contaminated water into Mahanoy Creek at an iron stained site just above Gilberton. (DEIS, p. 3-15) Indeed, one basic purpose of the remining and abandoned mine land reclamation efforts in this area, including those associated with the proposed project, is to reduce infiltration to the mine pool by eliminating surface water impoundments, creating surface drainage systems, establishing vegetation, and closing off mine openings and other conduits between the surface and the mine pool. Where both the groundwater repository (the mine pool) and the infiltration medium (mine spoil and perhaps tailings) are sources of contamination, infiltration of surface water should be avoided.

51-6

The fact that the water discharged into the tailings pond is expected to “percolate” and “seep” into the underlying mine pool begs a question about the proposed project’s environmental impact that the DEIS improperly fails to answer: what is that water percolating through, and what are the impacts of that percolation? The DEIS speculates that the “[d]ischarge of treated effluent to the mine pool by seepage would be expected to improve mine pool water quality by reducing concentrations of acidity and dissolved metals,” which in turn would improve the quality of the water PADEP’s Bureau of Abandoned Mine Reclamation pumps from the mine

51-7

pool into Mahanoy Creek a short distance from the tailings pond. (DEIS, p. 4-16) But the DEIS says that these “[w]ater quality improvements to the creek cannot be quantified due to uncertainty about chemical reactions occurring as water passes from the tailings pond to the mine pool and through the mine pool before discharge to the creek.” (Id.) In this regard, the DEIS acknowledges that the “[w]ater chemistry would be altered by mixing with mine pool water and by chemical reactions with soil and rock as the water passes from the tailings pond to the mine pool and through the mine pool,” and specifically mentions “reactions with pyrite and other minerals in the soil and rock.” (Id.) (emphasis added) It does not evaluate or even mention possible reactions with the tailings themselves and their constituents, nor does it evaluate the possibility that discharging clean water into the tailings pond might on balance degrade rather than improve the quality of the water in the mine pool.

51-7

“[R]eactions with pyrite and other minerals in the soil and rock” lying between the pond and the mine pool would be a concern even if the pond were just a depression in unreclaimed mine lands rather than a tailings pond. One reason federal and state programs have been established to encourage remining and (with or without remining) reclamation of abandoned mine lands is to eliminate water-collecting impoundments and prevent or minimize the amount of precipitation that percolates through toxic spoils or flows through surface openings and collects in the toxic environment of the mine pools. In general, the watchword for mine spoils and mine pools is “keep water out.” Indeed, the reclamation of mine lands associated with the project under consideration, as well as the existing Gilberton Power Company plant, is to reduce the amount of water that recharges the mine pools in this immediate vicinity, particularly the Gilberton mine pool.

That same general principle applies to waste disposal ponds or impoundments, particularly if they are unlined. Whether the waste is coal refuse or coal ash, the idea is to minimize the chance for mobilizing contaminants and causing water pollution by preventing water from coming in contact with the waste, and in particular preventing it from pooling on top of and percolating through the waste. Events at the PPL Martins Creek plant in Pennsylvania last August and September confirmed the danger of contaminants from water-laden fly ash being mobilized and contaminating groundwater. During cleanup operations following a large spill of fly ash into the Delaware River from its main, lined impoundment, PPL pumped water and fly ash into an unlined, 25-acre backup impoundment. Shortly thereafter, PPL received laboratory results showing that three of the four groundwater monitoring wells near the unlined impoundment had selenium concentrations between 70 and 75 parts per billion, well above the drinking water maximum contaminant level of 50 parts per billion. PPL immediately ceased adding waste to the unlined impoundment and suspended its cleanup operations until it received approval from PADEP to resume use of the larger, lined impoundment. PPL then pumped the water remaining in the unlined impoundment into the lined impoundment.

The wastewater handling plan for the proposed WMPI facility violates the cardinal rules of preventing water from percolating through mine spoil, keeping water out of the mine pool,¹ and preventing water from contacting and percolating through waste materials. The wastewater handling plan could be described as running clean water from the treatment system through a toxic filter before returning it to the mine pool, or as “rinsing” the waste in the tailings impoundment and the mine spoil or overburden beneath it. It is impossible to say that this rinsing of contaminant-laden media will not exacerbate the contamination of the mine pool, particularly if the impoundment contains coal ash from which pollutants like selenium, arsenic, boron, and molybdenum tend to leach more readily than from mine spoil. The DEIS fails to evaluate or even to recognize that because of the manner in which the treated wastewater would be handled, the proposed project may affect the water quality in the mine pool and Mahanoy Creek adversely rather than positively.

Even if the tailings pond contained no waste and simply served as part of a conduit to the mine pool, there would be no good reason to put treated wastewater (or any other water) into it. In this situation, the sensible thing to do with clean water is to put it into the nearby Mahanoy Creek, where its dilution effect will be maximized,² and where it will not have a chance to mobilize contaminants from tailings or pyritic mine spoil or overburden. In addition, in light of the fact that PADEP pumps an average of more than 2.5 billion gallons of water per year from the mine pool into Mahanoy Creek without treatment (DEIS, p. 3-15), the greater the net reduction of the mine pool, the better, both for the quality of the creek and for minimizing the consumption of energy associated with PADEP’s pumping operations. Obviously, reduction of the mine pool is maximized by putting the treated wastewater in the creek rather than returning it to the mine pool by infiltration (and having PADEP pump some of it out again just a few hundred meters downgradient at the Gilberton shaft).

51.8

Alternatively, it would be better from water quality, energy consumption, and cost standpoints to recirculate the treated wastewater directly and internally by connecting the treatment system gravity outflow to the water supply pipe. Instead of that short and direct connection, the proposed system uses a more circuitous and more contaminating route of discharging the treated wastewater into the tailings pond, having it percolate through the tailings and the underlying spoil/overburden into the mine pool, and then having it flow through the mine pool to the point where it is pumped back up the Gilberton shaft into the plant’s water supply system. Given that all of the water in the Gilberton mine pool eventually ends up in Mahanoy Creek (via the PADEP pump or the Packer V discharge or other overflows), and that PADEP pumps the mine pool into the creek because the level of the mine pool is too high much of the time, it makes no sense to put clean water back into the mine pool – i.e., indirectly into the creek – rather than directly into the creek. It makes even less sense to put it back through what

¹ Operation of the plant as proposed would result in a net reduction of water in the mine pool because the plant would incorporate water pumped from the mine pool into the liquid fuel and consume mine pool water in other industrial processes, such as vaporizing in the cooling towers. Discharging the treated wastewater into Mahanoy Creek rather than the tailings pond, however, would result in a larger net reduction in the amount of water in the mine pool.

² If the treated wastewater were discharged directly into Mahanoy Creek, essentially all of it would be available a short distance downstream to dilute any discharge from PADEP’s Gilberton shaft pump.

amounts to a toxic filter. The treated wastewater should either be recirculated at the proposed plant or discharged directly into the creek where can have its maximum dilution benefit without mobilizing pollutants from refuse, ash, or spoil materials.

51-9

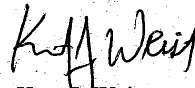
In sum, in addition to incorrectly assuming that the wastewater discharges associated with the proposed project will be permitted and regulated under the NPDES program, the DEIS improperly fails to analyze adequately the water quality effects of the proposed discharge of treated wastewater into the tailings pond and the alternatives to that proposed wastewater handling plan. Cf. 40 C.F.R. §§ 1502.1, 1502.2(g), 1502.16(d).

Conclusion

PennFuture recommends that WMPI investigate and pursue the addition of carbon sequestration to the proposed project, that it discharge its wastewater directly into Mahanoy Creek rather than into the "tailings pond," and that it immediately apply for and obtain the required NPDES permit for that discharge(s). Discharging properly treated wastewater into Mahanoy Creek pursuant to a NPDES permit will improve the water quality impacts of the project while rendering the associated shortcomings of the DEIS discussed above inconsequential. Even if the wastewater discharge(s) is directed into the tailings pond, however, PADEP must, consistent with its regulation of the existing Gilberton Power Company power plant discharge, require the new wastewater discharge(s) to be covered by a NPDES permit.³

PennFuture ends by emphasizing what we said at the beginning. These comments are not meant to oppose, hamper, or delay the proposed WMPI facility, but on the contrary to prevent a potential problem and thereby avoid possible delays. Overall, we seek to make what we regard as an important and potentially industry-transforming project even better.

Sincerely,



Kurt J. Weist
Senior Attorney
Harrisburg Office

cc: Deputy Secretary Thomas K. Fidler, PADEP
Deputy Secretary Cathleen C. Myers, PADEP
Kate Crowley, Water Management Program Manager, PADEP; NERO

³ In addition, DEP should amend the draft TMDL for mine drainage impairments to Mahanoy Creek so that it includes Wasteload Allocations for the point source discharges of wastewater from the existing Gilberton Power Company plant, the proposed coal-to-liquid fuel plant, and the culm beneficiation operations associated with those plants.

Weist, Kurt J. (51)

Comment 51-1

The DEIS states that “[t]he proposed facilities would increase global CO₂ emissions by about 832,000 tons per year, which is about 0.003% of global emissions resulting from fossil fuel combustion.” (DEIS, p. xxi) The DEIS also indicates that the “Rectisol unit” would recover an unidentified portion of this carbon dioxide, some of which would be sold to specialty gas companies, and the remainder of which “could be sequestered in the future (although no firm plans currently exist.)” (DEIS, p. 2-7) This “CO₂ Sequestration” option also is shown in the generalized schematic diagram on page 2-4 of the DEIS.

The DEIS says little about the alternative of CO₂ sequestration beyond indicating that there are no firm plans today to sequester the carbon dioxide that is separated from the gasses prior to Fischer-Tropsch synthesis. Sequestration is not among the “Alternative Dismissed from Further Consideration” discussed in Section 2.2.2 of the DEIS, nor should it be. In light of the scientific consensus that greenhouse gas emissions must be curbed, where a production process already includes recovery of carbon dioxide, it is a shame to see that captured CO₂ vented to the atmosphere rather than permanently sequestered beneath the ground. The DEIS should discuss that alternative, and WMPI and the Commonwealth of Pennsylvania should vigorously pursue it in order to demonstrate another important technology, reduce the new plant’s greenhouse gas emissions, and remove a potential obstacle to replication elsewhere.

Response:

Estimates of CO₂ produced by the proposed facility have been revised. While it was previously anticipated that the concentrated CO₂ stream would be sold as a byproduct, the industrial participant has informed DOE that the commercial sale of the CO₂ would not occur in the foreseeable future. The possibility of carbon sequestration is discussed in new Section 5.1.4.

Comments 51-1A

What is in the “tailings pond” into which two wastewater discharges will be directed? Does that pond contain coal refuse or coal ash materials from which metals, sulfate, or other pollutants may be released and then enter the underlying mine pool?

Response:

See the responses to comments 41-20 and 51-6.

Comment 51-2

Section 3.4.3 of the DEIS (“Mine Pool”) states that “[t]reated wastewater from the existing Gilberton Power Plant is discharged to a 6-acre tailings pond in the Mahanoy Creek valley. Pond capacity is approximately 156 million gal. Water seeps from the pond into the underlying mine pool. Discharge to the pond is regulated by Pennsylvania NPDES industrial wastewater discharge permit 278784, issued in 1997.” Section 7.2 of the DEIS (“State Requirements”) reiterates some of this information but describes the pond receiving the wastewater as an “ash pond” instead of a “tailings pond.” (DEIS, p. 7-5)

In fact, the Gilberton Power Company's industrial waste discharge is authorized by NPDES Permit No. PA0061697, which was issued before 1997, see 27 Pa. Bull. 5282-83 (October 11, 1997) (proposing renewal of NPDES permit), and which is again before the Pennsylvania Department of Environmental Protection (PADEP) for renewal. See 35 Pa. Bull. 2421 (April 23, 2005). The notice of the most recent renewal of the NPDES permit does not mention a tailings pond and states that "Gilberton Power Company . . . is authorized to discharge from a facility located in Mahanoy Township, Schuylkill County to Mahanoy Creek." 30 Pa. Bull. 253 (January 8, 2000) (emphasis added). See also 29 Pa. Bull. 4081 (proposing "renewal of an NPDES permit to discharge treated wastewater into Mahanoy Creek") (emphasis added). In light of the general objective of preventing water from coming in contact with coal ash and coal refuse, it is unclear why PADEP would authorize any discharge, particularly a discharge of treated wastewater, into a tailings pond containing coal refuse or coal ash. In any event, the Pennsylvania Bulletin notices cited immediately above show that PADEP regards a discharge to this particular tailings pond as an indirect discharge to Mahanoy Creek, presumably via the Gilberton mine pool.

Response:

Section 7.2 has been corrected to refer to a "tailings pond" instead of an "ash pond" and to correctly identify the NPDES permit number as PA0061697. (The draft EIS listed the Pennsylvania Department of Environmental Protection authorization number associated with that permit.)

As the comment notes, the NPDES permit for the Gilberton Power Plant authorizes discharge to the creek. However, the operators of the power plant have instead elected to discharge to the tailings pond. In effect, the discharge to the tailings pond (which releases water to the underlying mine pool) is an indirect discharge to Mahanoy Creek because mine pool water is pumped into the creek at Gilberton.

Comment 51-3

A DEIS must list all federal permits that must be obtained in order to implement the proposal. 40 C.F.R. § 1502.25(b). Immediately after discussing the existing, NPDES-permitted Gilberton Power Company discharge, Section 7.2 of the DEIS states that the "[d]ischarge of treated effluent from the proposed facilities would also require an NPDES permit issued by [PADEP]. A new set of effluent standards would be established for the new facilities." (DEIS, p.7-5) But WMPI has not applied for, and apparently has no intention of applying for, a NPDES permit. It has applied only for a Water Quality Management "Part II" Permit (WQM Permit No. 5405201) for "the construction and operation of a new wastewater treatment facility to discharge .73 mgd of treated processed wastewater into the Mahony [sic] Valley Mine Pool." 35 Pa. Bull. 1998 (April 2, 2005).

Response:

DOE expects that a permit would be required for the discharge, as discussed in Section 7.2. See Sections 2.1.6.2 and 4.1.4.1 for discussions of the application for a Water Quality Management Part II Permit and requested NPDES effluent limits that WMPI submitted to the Pennsylvania Department of Environmental Protection.

Comment 51-4

As described in the DEIS, however, the treated wastewater from the proposed plant will not be discharged directly into the mine pool, but instead into the “tailings pond,” from which it will “percolat[e] back to the mine pool.” (DEIS, p. 2-12) The DEIS indicates that the tailings pond will receive two discharges associated with the proposed project: one of wastewater used in the flotation process by a new or upgraded culm beneficiation plant, and the other from the coal-to-liquid fuel plant’s wastewater treatment system. (DEIS, pp. 2-12, 2-13) Contrary to the figure of .73 million gallons per day appearing in the Pennsylvania Bulletin notice, however, the DEIS estimates the “[e]ffluent discharged to tailings pond” at 1,867 gallons per minute, or roughly 2.7 million gallons per day. Of that total, about 380 gallons per minute would come from the beneficiation process, and the remainder from the coal-to-liquid fuel plant’s treatment system. (DEIS, pp. 2-12, 2-13) And contrary to its own later suggestion in Section 7.2 that the “[d]ischarge of treated effluent from the proposed facilities would also require an NPDES permit issued by [PADEP]” (DEIS, p. 7-5), Section 2.1.6.2 of the DEIS (“Liquid Discharges”) states that wastewater from the proposed plant’s treatment facility would be “discharge[d] to a tailings pond [with] seepage back to the mine pool,” but that “[n]o wastewater would be discharged to surface waters.” (DEIS, p. 2-15)

Response:

The discrepancies in the draft EIS noted by the commenter have been resolved and are reflected in revisions to Sections 2.1.5.2, 2.1.6.2, 3.4, and 4.1.4. The value of 0.73 million gallons per day that appeared in the Pennsylvania Bulletin is the design capacity of a planned wastewater treatment unit, not the total volume of effluent to be discharged.

Comment 51-5

PennFuture suspects that the unlined “tailings pond” that will receive the discharges from the beneficiation plant and the coal-to-liquid fuel plant’s treatment system, shown on page 2-3 of the DEIS, is the same tailings pond that currently receives the NPDES-permitted discharge of treated wastewater from the existing Gilberton Power Company power plant, as well as the discharge of wastewater from the existing culm beneficiation plant. (Draft EIS, p. 3-16) Given that a NPDES permit is required to discharge treated wastewater from the existing power plant into the tailings impoundment, the same must be true for a discharge of treated wastewater from the proposed coal-to-liquid fuel plant (and also for a discharge of wastewater from a new or upgraded culm beneficiation plant). Pennsylvania’s NPDES regulations define “[s]urface waters” as including “ponds.” 25 Pa. Code § 92.1. The exclusion in that definition for “water at facilities approved for wastewater treatment such as waste water treatment impoundments” applies to engineered treatment structures meeting modern design and construction standards, like the “synthetic-lined retention pond” in the proposed coal-to-liquid fuel plant’s treatment system. The exclusion does not apply to unlined and leaking waste disposal impoundments like a tailings pond.

For the reasons explained in the next section of these comments, any discharge of wastewater into a tailings pond would seem ill-conceived. If such a discharge occurs, however, it must be authorized by a NPDES permit.

Response:

The unlined tailings pond to which WMPI proposes to discharge effluents is the same pond that currently receives the NPDES-permitted discharges from the Gilberton Power Company and the existing culm beneficiation plant. As indicated in Section 7.2, the proposed discharge is expected to require a new NPDES permit. The potential impacts of the discharge on water quality in the mine pool and Mahanoy Creek are discussed in Section 4.1.4.1. Also in Section 4.1.4.1, DOE has added an analysis of the potential impacts from direct discharge of the treated wastewater to Mahanoy Creek.

Comment 51-6

In many contexts, PennFuture encourages recharging the groundwater by infiltration of clean water through the soil mantle, whether by spray irrigation of treated wastewater, use of porous paving materials, or use of engineered and “non-structural” best management practices for increasing stormwater infiltration. In the context at hand, however, every effort should be made to keep water out of the toxic environment of the mine pool(s) that collect water infiltrating from the surface lands, and from which PADEP pumps an average of 2.5 billion gallons per year of contaminated water into Mahanoy Creek at an iron stained site just above Gilberton. (DEIS, p. 3-15) Indeed, one basic purpose of the remining and abandoned mine land reclamation efforts in this area, including those associated with the proposed project, is to reduce drainage systems, establishing vegetation, and closing off mine openings and other conduits between the surface and the mine pool. Where both the groundwater repository (the mine pool) and the infiltration medium (mine spoil and perhaps tailings) are sources of contamination, infiltration of surface water should be avoided.

The fact that the water discharged into the tailings pond is expected to “percolate” and “seep” into the underlying mine pool begs a question about the proposed project’s environmental impact that the DEIS improperly fails to answer: what is that water percolating through, and what are the impacts of that percolation? The DEIS speculates that the “[d]ischarge of treated effluent to the mine pool by seepage would be expected to improve mine pool water quality by reducing concentrations of acidity and dissolved metals,” which in turn would improve the quality of the water PADEP’s Bureau of Abandoned Mine Reclamation pumps from the mine pool into Mahanoy Creek a short distance from the tailings pond. (DEIS, p. 4-16) But the DEIS says that these “[w]ater quality improvements to the creek cannot be quantified due to uncertainty about chemical reactions occurring as water passes from the tailings pond to the mine pool and through the mine pool before discharge to the creek.” (Id.) In this regard, the DEIS acknowledges that the “[w]ater chemistry would be altered by mixing with mine pool water and by chemical reactions with soil and rock as the water passes from the tailings pond to the mine pool and through the mine pool,” and specifically mentions “reactions with pyrite and other minerals in the soil and rock.” (Id.) (emphasis added) It does not evaluate or even mention possible reactions with the tailings themselves and their constituents, nor does it evaluate the possibility that discharging clean water into the tailings pond might on balance degrade rather than improve the quality of the water in the mine pool.

...the greater the net reduction of the mine pool, the better, both for the quality of the creek and for minimizing the consumption of energy associated with PADEP’s pumping operations. Obviously, reduction of the mine pool is maximized by putting the treated wastewater in the creek rather than returning it to the mine pool by infiltration (and having

PADEP pump some of it out again just a few hundred meters downgradient at the Gilberton shaft).

The treated wastewater should either be recirculated at the proposed plant or discharged directly into the creek where can have its maximum dilution benefit without mobilizing pollutants from refuse, ash, or spoil materials.

Response:

Section 4.1.4.1 has been revised to include assessments of the potential impacts of (1) increased recycling of wastewaters within the facility and (2) discharging facility effluents directly to Mahanoy Creek, as suggested by the commenter.

The solids that settle out in the tailings pond to which WMPI proposes to discharge effluents consist of silt, clay, coal fines, and other particulates from coal washing. These materials would have the same chemistry as the underlying soil and rock. The pond does not contain any coal combustion ash, nor does it receive effluents that contain such ash. If coal combustion ash is also present in the pond, it would not be expected to leach any constituents not also present in the coal from which it was derived, and its presence could have beneficial effects on water quality due to its alkalinity (see Hornberger et al. 2004, cited in Section 4.1.4.1).

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☐ Yes
for the Final EIS and Record of Decision? ☒ No

Name: <i>El Brankus</i>	Address: <i>68 Wiggan St</i>
Affiliation:	<i>New Philadelphia PA</i>
Telephone: <i>(570) 277-6900</i>	<i>17159</i>

Comments: *ALL FOR IT*

52-1

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☒**

Do you wish to be placed on the mailing list ☐ Yes
for the Final EIS and Record of Decision? ☒ No

Name: <i>CURT CAMPFIELD</i>	Address: <i>102 Dynamite Rd.</i>
Affiliation: <i>Ironworkers #420 Retiree</i>	<i>Robesonia Pa 19551</i>
Telephone:	

Comments:
*I believe we should stay on top of cutting edge
technology like synthetic Diesel for the good
of all Americans*

53-1

Brakus, Ed (52)

Comment 52-1

All for it.

Response:

The comment has been noted.

Campfield, Curt (53)

Comment 53-1

I believe we should stay on top of cutting edge technology like synthetic diesel for the good of all Americans.

Response:

The comment has been noted.

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☒ Yes
for the Final EIS and Record of Decision? ☐ No

Name: J. HANLEY

Address: 538 E. MAH. AVE
MAH. CITY, PA

Affiliation: PROPERTY OWNER

Telephone: 773-3161

Comments: PROBLEM FROM WATER BEING PUMPED OUT OF
GILBERTON & MAHANNOY VALLEY-

54-1

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☒
Pottsville, PA -- January 10, 2006 ☒**

Do you wish to be placed on the mailing list ☐ Yes
for the Final EIS and Record of Decision? ☐ No

Name: Brandon Harbler

Address: 506 Willow St
Pottsville PA 17901

Affiliation:

Telephone: 570-527-0770

Comments:

Schoykill County Union workers need
this job!

55-1

Hanley, J. (54)

Comment 54-1

Problem from water being pumped out of Gilberton and Mahanoy valley.

Response:

Potential impacts of water withdrawals for the proposed facilities are discussed in Section 4.1.4.

Harsner, Brandon (55)

Comment 55-1

Schuylkill County union workers need this job!

Response:

The comment has been noted.

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project**

Shenandoah, PA -- January 9, 2006 ☐

Pottsville, PA -- January 10, 2006 ☐

Do you wish to be placed on the mailing list ☒ Yes
for the Final EIS and Record of Decision? ☐ No

Name: *Bill Hill Jr.*

Address: *135 Knoll Dr.*

Affiliation: *Boiceanagers Union*

Lombard, PA. 18235

Telephone: *481-629-4147*

Comments:

*STOP FOOLING AROUND
BUILD THE PLANT WE
NEED GOOD PAYING JOBS
IN THE REGION*

56-1

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project**

Shenandoah, PA -- January 9, 2006 ☐

Pottsville, PA -- January 10, 2006 ☐

Do you wish to be placed on the mailing list ☒ Yes
for the Final EIS and Record of Decision? ☐ No

Name: *Robert LeGeo*

Address: *P.O. Box 49
Lombard Pa. 18241*

Affiliation:

Telephone: *570-3844358*

Comments: *I feel this is an exciting time for
our County. Helping us become more energy
independent.*

57-1

Hill, Jr., Bill (56)

Comment 56-1

Stop fooling around build the plant we need good paying jobs in this region.

Response:

The comment has been noted.

Leggo, Robert (57)

Comment 57-1

I feel this is an exciting time for our county. Helping us to become more energy independent.

Response:

The comment has been noted.

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☐ Yes
for the Final EIS and Record of Decision? ☐ No

Name: Brad Mickatavage	Address: 160 Valley Hill Rd
Affiliation: Boilermakers	Ashland PA 17921
Telephone: 570-875-4454	

Comments:

Area needs this project for economical development
& for jobs

58-1

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☒**

Do you wish to be placed on the mailing list ☒ Yes
for the Final EIS and Record of Decision? ☐ No

Name: CHARLES PREMICH	Address: PO BOX 222 ST CLAIR PA 17970
Affiliation: BOILERMAKERS LOCAL 13	
Telephone: 570 429 0295	

Comments: PRO - LETS TURN THE UNSIGHTLY CULM DRAKTS INTO
AN ASSET.

59-1

Mickatavage, Brad (58)

Comment 58-1

Area needs this project for economical development and for jobs.

Response:

The comment has been noted.

Premich, Charles (59)

Comment 59-1

Pro – lets turn the unsightly culm banks into an asset.

Response:

The comment has been noted.

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☒**

Do you wish to be placed on the mailing list ☒ Yes
for the Final EIS and Record of Decision? ☐ No

Name: <i>Leon Stevens</i>	Address: <i>36 Vulcan Rd</i>
Affiliation: <i>resident</i>	<i>Carneville</i>
Telephone:	
Comments: <i>I am for the project we need jobs!!</i>	

60-1

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☐ Yes
for the Final EIS and Record of Decision? ☐ No

Name: <i>John P Sweat</i>	Address: <i>9 Allenwood Cir</i>
Affiliation:	<i>Sch. Haven PA</i>
Telephone: <i>570-739-0967</i>	<i>17970</i>
Comments: <i>Build IT</i>	

61-1

Stevens, Jason (60)

Comment 60-1

I'm for the project. We need jobs!!

Response:

The comment has been noted.

Sweat, John P. (61)

Comment 61-1

Build it.

Response:

The comment has been noted.

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☒
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☒ Yes
for the Final EIS and Record of Decision? ☐ No

Name: <i>Daniel J. Burke</i>	Address: <i>134 S. 5rd</i>
Affiliation: <i>Local #76</i>	<i>Frickville, PA 17931</i>
Telephone: <i>(570) 874-0906</i>	

Comments: *Looking Forward To Future Work in The Area*

62-1

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☒
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☒ Yes
for the Final EIS and Record of Decision? ☐ No

Name: <i>Sharon R. Chiao</i>	Address: <i>180 Roosevelt - Marica</i>
Affiliation: <i>MAR. Twp. Supervisor</i>	<i>Mahanoy City, Pa. 17948</i>
Telephone: <i>570-773-2782</i>	

Comments: *I have read your draft impact statement -
I still have concerns with odor, noise and air
pollution. The health impacts on this area are of the
most concern. Also safety - school children and prisoners
and prison staff - Property values will be of no value -
The ordinary citizen should have the final word - not
big business.*

63-1

Burke, Daniel J. (62)

Comment 62-1

Looking forward to future work in the area.

Response:

The comment has been noted.

Chiao, Sharon (63)

Comment 63-1

I have read your draft impact statement – I still have concerns with odor, noise, and air pollution. The health impacts on this area are of the most concern. Also safety – school children and prisoners and prison staff. Property values will be of no value – the ordinary citizen should have the final word – not big business.

Response:

The comments have been noted. Revised discussion of impacts related to odor can be found in Section 4.1.2.2, Operation, Scoping Concerns. Revised discussion of impacts related noise can be found in Section 4.1.10. Revised discussion of impacts related to air quality can be found in Section 4.1.2. Also, Section 4.1.9.1, Public Health has been revised.

Registered Attendance at Public Hearings for the Draft Environmental Impact Statement (EIS) Gilberton Coal-to-Clean Fuels and Power Project Shenandoah, PA -- January 9, 2006 <input type="checkbox"/> Pottsville, PA -- January 10, 2006 <input type="checkbox"/>	
Do you wish to be placed on the mailing list <input type="checkbox"/> Yes for the Final EIS and Record of Decision? <input checked="" type="checkbox"/> No	
Name: <i>Traci Confer</i>	Address: <i>1434 Elbridge St</i>
Affiliation:	<i>Philadelphia PA 19149</i>
Telephone: <i>215-743-4884</i>	
Comments: <i>I think you've been far too optimistic about the water usage. The impression that the Draft EIS gives is that water is no problem. However, I read the Susquehanna River Basin Commission report and it's full of precautionary statements and makes it obvious that there's insufficient documentation of inter-mine pool flow rates. Subsidence is not a trivial consequence and any activity that risks causing subsidence should be harshly limited.</i>	

64-1

Registered Attendance at Public Hearings for the Draft Environmental Impact Statement (EIS) Gilberton Coal-to-Clean Fuels and Power Project Shenandoah, PA -- January 9, 2006 <input checked="" type="checkbox"/> Pottsville, PA -- January 10, 2006 <input type="checkbox"/>	
Do you wish to be placed on the mailing list <input type="checkbox"/> Yes for the Final EIS and Record of Decision? <input type="checkbox"/> No	
Name: <i>RALPH COURAB</i>	Address: <i>23 LIA ROAD</i>
Affiliation:	
Telephone: <i>570-874-1211</i>	
Comments: <i>How does it benefit me?</i>	

65-1

Confer, Traci (64)

Comment 64-1

I think you've been far too optimistic about the water usage. The impression that the Draft EIS gives is that water is no problem. However, I read the Susq. River Basin Commission report and it's full of precautionary statements and makes it obvious that there's insufficient documentation of inter-mine pool flow rates. Subsidence is not a trivial consequence and any activity that risks causing subsidence should be harshly limited.

Response:

The EIS has been revised to discuss the information and analysis contained in the Susquehanna River Basin Commission decision document (SRBC 2005) that authorizes withdrawal and consumptive use of mine-pool water for the proposed project. Section 4.1.4.1 includes the revised assessment of potential water use impacts and Section 4.1.3.3 includes the revised assessment of the potential for land subsidence.

Conrad, Ralph (65)

Comment 65

How does it benefit me?

Response:

EIS Section 4.1.7 addresses both the adverse and beneficial effects of the proposed project on social and economic resources in the area and the larger region.

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☒ Yes
for the Final EIS and Record of Decision? ☐ No

Name: Joseph M. Daugert	Address: 328 S. Main St.
Affiliation: Operating Engineers	Frankville PA.
Telephone: 570-874-4001	

Comments:

Good Environmental Jobs For the
Future of Schuylkill County for the
well being.

66-1

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☐ Yes
for the Final EIS and Record of Decision? ☐ No

Name: Joseph Power	Address: 100 Roosevelt Drive
Affiliation: Moore Citizens	Moore, Pa
Telephone:	

Comments: No Plant in Mahanoy Township
do not need another plant to
pollute the air

67-1

Dougent, Joseph (66)

Comment 66-1

Good environmental jobs for the future of Schuylkill county for the well being.

Response:

The comment has been noted.

Dower, Joseph (67)

Comment 67-1

No plant in Mahanoy Township. Do not need another plant to pollute the air.

Response:

The comment has been noted.

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☒ Yes
for the Final EIS and Record of Decision? ☐ No

Name: JoAnn Dower	Address: 100 Roosevelt Dr.
Affiliation: MOREA Citizen	Mahanoy City Pa. 17948
Telephone:	

Comments: Not happy with plant going on our
mountain
Concerned with air we will breathe
in and toxic smell

68-1

68-2

**Registered Attendance at Public Hearings for the
Draft Environmental Impact Statement (EIS)
Gilberton Coal-to-Clean Fuels and Power Project
Shenandoah, PA -- January 9, 2006 ☐
Pottsville, PA -- January 10, 2006 ☐**

Do you wish to be placed on the mailing list ☐ Yes
for the Final EIS and Record of Decision? ☒ No

Name: Douglas Fishburn	Address: 611 E Norwegian St
Affiliation:	Pottsville Pa 17901
Telephone: (570) 628-3543	

Comments: I like to see it go?

69-1

Dower, JoAnn (68)

Comment 68-1

Not happy with plant going on our mountain.

Response:

The comment has been noted.

Comment 68-2

Concerned with air we will breathe in and toxic smell.

Response:

Your concerns about the potential for odor and toxic emissions from the proposed Gilberton coal-to-clean fuels project have been noted. Air emission impacts are discussed in Section 4.1.2, and odor impacts are addressed in Section 4.1.2.2, under Scoping Concerns.

Fishburn, Douglas (69)

Comment 69-1

I like to see it go?

Response:

The comment has been noted.